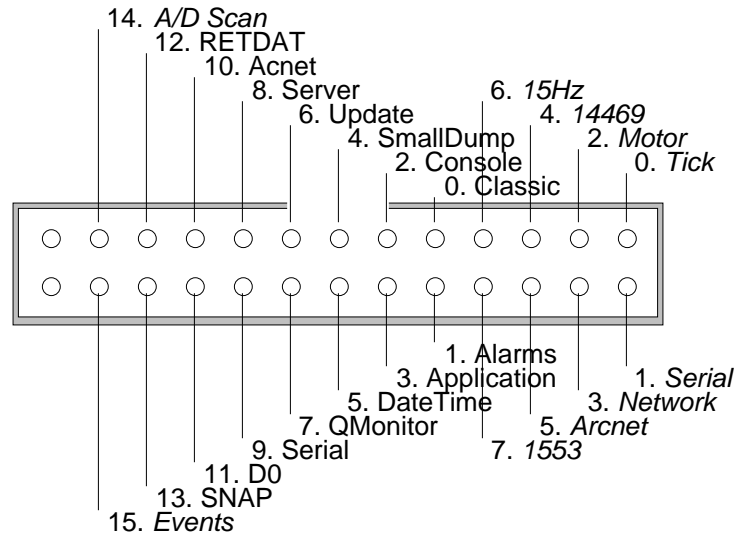


## Diagnostic timing of tasks, interrupts

Thu, Apr 7, 1994

On the Internet Rack Monitor is a 26-pin connector of test points that permit monitoring of system software timing. Some of the signals measure the time taken by various tasks, while others measure the time taken by interrupt routines. Here is a layout of the test points connector signals as viewed from the front of the IRM.

Tasks are in plain text style, while *interrupt routines* are in italics.



- 15. *A/D scan interrupt*. 1Khz from each analog IP board.
- 14. *Clock Events interrupt* from digital IP board.
- 13. SNAP task. Handles Internet Protocols IP,ARP,ICMP,IGMP,UDP.
- 12. RETDAT task. Handles Acnet data request/settings protocol.
- 11. D0 task. Handles D0 data request/settings protocol.
- 10. Acnet task. Supports Acnet header-based communications.
- 9. Serial task. Handler for RS-232 serial input.
- 8. Server task. Delivers replies to Classic protocol server requests.
- 7. QMonitor task. Provides cleanup/timeout support for system activities.
- 6. Update task. Updates data pool, runs local appl's and fulfills active requests.
- 5. Date/time task. Provides time-of-day support.
- 4. Small memory dump task. Displays 8-bytes of memory on last line of CRT.
- 3. Application task. Manages activity of current page application.
- 2. Console task. Supports local console I/O, real or emulated.
- 1. Alarms task. Scans for and reports analog, binary and comment alarms.
- 0. Classic task. Handles Classic data request/settings protocol.

- 7. *1553 interrupt* for end-of-command from 1553 chip used in D0.
- 6. *15 Hz interrupt*. Handler for 15 Hz cycle interrupt from external timer.
- 5. *Arcnet interrupt* from Arcnet chip used in SRMs.
- 4. *14469 interrupt*. Local console interrupts from crate utility board.
- 3. *Network interrupt* from token ring or ethernet controller.
- 2. *Motor interrupt*. Motor step interrupt support at 150 Hz.

0. *Tick interrupt* providing 100 Hz timing reference to kernel.